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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,619	01/16/2002	David C. Banks	56763.US	6452

408 7590 10/15/2004

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EXAMINER	
BROWN, VERNAL U	
ART UNIT	**PAPER NUMBER**
2635	

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/050,619	BANKS ET AL.	
	Examiner	Art Unit	
	Vernal U Brown	2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 July 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to communication filed on July 26, 2004.

Response to Amendment

The examiner has acknowledged the amendment of claim 1.

Response to Arguments

Applicant's arguments filed 7/26/2004 have been fully considered but they are not persuasive.

Regarding applicant argument regarding the transponder sized to tightly contain the transponder, Jacob et al. teaches the upper shell (11) is secured to the lower shell using a screw (figure 4) further securing the transponder 26 in the transponder recess. Jacob et al also teaches the transponder is cemented in the recess (col. 5 lines 31-32) further implying that the transponder is tightly secured in the transponder recess.

Regarding applicant argument regarding the transponder recess having an open receiving end. With the upper shell of the housing remove the transponder recess 27 is shown to be open ended in figure 4. Jacob et al. refers to the cementing of the transponder (col. 5 lines 31-32) in the recess is an alternative attachment means.

Regarding applicant's argument concerning claim 6, the reference of Jacob et al. teaches the shank of the key is rectangular (figure 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 11-14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob et al. U.S Patent 6705141 in view of Ozawa et al. U.S Patent 5768925.

Regarding claims 1 and 11, Jacob et al. teaches a key assembly (figure 1) comprising: A key shank (30) having a blade portion and a handle portion (32), said handle portion having a thickness (figure 4); a transponder for receiving a wireless interrogation signal and transmitting a wireless response signal in response to the interrogation signal (col. 5 lines 21-30); a shuttle formed by an upper shell (11) forming a first planar surface and lower shell (12) forming a second planar surface for holding the key in place (col. 3 lines 37-40). Jacob et al. teaches opening (shank recess) for holding the key shank in place and having an obstruction for limiting the depth that the handle portion is received in the shank (col. 4 lines 23-30). Jacob et al. also teaches a transponder recess (col. 5 lines 31-32) having a receiving end for receiving the transponder and is tightly secured by a screw (figure 4) and a terminal end having an obstruction for limiting the depth that the transponder is received in the transponder recess (figure 4); and a key head (22) integrally formed about the shuttle, transponder, and handle portion of the key shank (figure 3). Jacob et al. is however silent on teaching the distance separated by the first and second surface of the shuttle is greater than the

thickness of the shank handle portion and the shank recess is sized to tightly contain the key handle portion. One skilled in the art recognizes that the distance separated by the first and second surface of the shuttle must be greater than the thickness of the shank handle portion in order for the handle of the shank to fit into the shuttle. One skilled in the art recognizes the sizing of shank recess to tightly contain the key shank is a conventional practice in order to maintain the key shank in a fixed position.

It would have been obvious to one of ordinary skill in the art for the first and second surface of the shuttle to be greater than the thickness of the shank handle portion in Jacob et al. because Jacob et al. suggests the shank handle fit into the shuttle and one skilled in the art recognizes that the distance separated by the first and second surface of the shuttle must be greater than the thickness of the shank handle portion in order for the handle of the shank to fit into the shuttle. One skilled in the art recognizes the sizing of shank recess to tightly contain the key shank is a conventional practice in order to maintain the key shank in a fixed position.

Regarding claims 2-3 and 12-13, Jacob et al. teaches the transponder (26) having both a cylindrical and rectangular shape (figure 4).

Regarding claim 4, Jacob et al. teaches the terminal end of the shank recess is closed (figure 4).

Regarding claim 5, Jacob et al. teaches the terminal end of the transponder recess (27) is closed (figure 4).

Regarding claim 6, Jacob et al. teaches handle portion (30)of said key shank is

substantially rectangular (figure 4).

Regarding claims 7 and 14, Jacob et al. teaches the handle portion of the key shank is offset from the blade portion of the key shank, forming a shoulder adjacent the handle portion, said shank recess including a ledge for receiving the shoulder (figure 4).

Regarding claim 18, Jacob et al. teaches a key assembly comprising:

a key shank (31) having a blade portion and a handle portion (30) offset from the blade portion to form a shoulder adjacent the handle portion, said handle portion having a thickness (figure 4);

a transponder for receiving a wireless interrogation signal and transmitting a wireless response signal in response to the interrogation signal (col. 5 lines 21-30);

a shuttle formed by an upper shell (11) forming a first planar surface and lower shell (12) forming a second planar surface for holding the key in place (col. 3 lines 37-40).

a shank recess having an open receiving end for receiving the handle portion of the key shank (figure 4);

a terminal end in opposed relation to the open receiving end; and a ledge for receiving the shoulder of the key shank handle portion for limiting the depth that the handle portion is received in the shank recess (figure 4);

a transponder recess (27) having an open receiving end for receiving the transponder and a terminal end (the end wall of the transponder recess); and a key head (22) integrally formed about said shuttle, transponder, and handle portion of the key shank. Jacob et al. is however silent on teaching the distance separated by the first and second surface of the shuttle is greater than the thickness of the shank handle portion. One skilled in the art recognizes that the distance separated by the first and second surface of the shuttle must

be greater than the thickness of the shank handle portion in order for the handle of the shank to fit into the shuttle.

It would have been obvious to one of ordinary skill in the art for the first and second surface of the shuttle to be greater than the thickness of the shank handle portion in Jacob et al. because Jacob et al. suggests the shank handle fit into the shuttle and one skilled in the art recognizes that the distance separated by the first and second surface of the shuttle must be greater than the thickness of the shank handle portion in order for the handle of the shank to fit into the shuttle.

Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob et al. U.S Patent 6705141 in view of Ozawa et al. U.S Patent 5768925 and further in view of Mizuno et al. U.S Patent 5727408.

Regarding claims 8 and 15, Jacob et al. in view of Ozawa et al. teaches means for attaching the shank handle to the upper and lower shell forming the shuttle (col. 5 lines 21-30) but is silent on teaching the handle portion includes two spaced apart legs and shuttle includes a single shank recess for receiving both legs. Mizuno et al. in an art related key device teaches a shank handle (112) having two spaced apart legs and a single shank recess for receiving both legs (figure 9).

It would have been obvious to one of ordinary skill in the art to for the shank handle portion to two spaced apart legs and shuttle includes a single shank recess for receiving both legs in Jacob et al. in view of Ozawa et al. as evidenced by Mizuno et al. because Jacob et al. in view of Ozawa et al. suggests means for attaching the shank

handle to the upper and lower shell forming the shuttle and Mizuno et al. teaches having two spaced apart legs as a means of attaching the shank handle to the shuttle.

Claims 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob et al. U.S Patent 6705141 in view of Ozawa et al. U.S Patent 5768925 and further in view of Thomas U.S Patent 4840586.

Regarding claim 9 and 16, Jacob et al. in view of Ozawa et al. teaches a recess (27) for inserting the transponder and the recess is shaped in order to accommodate the transponder (figure 4) but is silent on teaching the recess is keyed. One skilled in the art recognized that parts that are attached or inserted into each other are conventionally keyed in order to prevent improper connection as evidenced by Thomas (col. 1 lines 34-36).

It would have been obvious to one of ordinary skill in the art to key the transponder recess in order to ensure a proper orientation of the transponder in Jacob et al. in view of Ozawa et al. as evidenced by Thomas because Jacob et al. in view of Ozawa et al. suggests a recess (27) for inserting the transponder and the recess is shaped in order to accommodate the transponder and one skilled in the art recognized that parts that are attached or inserted into each other are conventionally keyed in order to prevent improper connection as evidenced by Thomas.

Claims 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob et al. U.S Patent 6705141 in view of Ozawa et al. U.S Patent 5768925 and further in view of Wendling et al. U.S Patent 4963106.

Regarding claims 10 and 17, Jacob et al. in view of Ozawa et al. teaches a shuttle formed by an upper shell (11) forming a first planar surface and lower shell (12) forming

a second planar surface for holding the key in place (col. 3 lines 37-40) but is silent on teaching the first and second surface are corrugated. One skilled in the art recognizes that corrugations are conventionally used in bonding surfaces together as evidenced by Wendling et al. (col. 2 lines 65-col. 3 line 5).

It would have been obvious to one of ordinary skill in the art for the first and second surface to be corrugated in Jacob et al. in view of Ozawa et al. as evidenced by Wendling et al. because Jacob et al. in view of Ozawa et al. suggests bonding the upper and lower surfaces and one skilled in the art recognizes that corrugations are conventionally use in bonding surfaces together as evidenced by Wendling et al.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vernal U Brown whose telephone number is 571-272-3060. The examiner can normally be reached on 8:30-6:30 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vernal Brown
October 5, 2004

BRIAN ZIMMERMAN
PRIMARY EXAMINER